



LYME DISEASE

WHAT IS THE PUBLIC HEALTH PROBLEM?

- Lyme disease is the most prevalent vector-borne infectious disease in the United States.
- Approximately 16,000 cases are reported to CDC each year, but many more are unreported.
- If not diagnosed and treated in its early stages, Lyme disease can result in serious complications.
- Laboratory testing for Lyme disease has improved, but greater accuracy is still needed.
- New, environmentally safe and cost-effective ways to control ticks are also needed.

WHAT HAS CDC ACCOMPLISHED?

CDC's Lyme disease prevention and control activity is a science-based program of education, research, and service, that partners with other federal agencies, state and local health departments, and other non-federal organizations. CDC supports national surveillance, epidemiologic response, field and laboratory research, consultation, and educational activities through intramural initiatives. CDC also funds collaborative studies on community-based prevention methods, improved diagnosis and understanding of pathogenesis, and development and testing of new tools and methods for tick control.

CDC has mapped the national distribution and risk for Lyme disease and defined environments, activities, and behaviors that place people at risk. CDC developed new and effective devices and methods for preventing infection and safely reducing vector ticks in the environment, such as insecticide-treated rodent bait boxes. CDC developed improved and standardized diagnostic tests for Lyme disease and provided physician standards for use of these tests. CDC's research programs have provided an understanding of the pathogenesis of infection with the Lyme disease bacterium.

WHAT ARE THE NEXT STEPS?

Lyme disease and other emerging tick-borne infectious diseases are cause for increasing concern with regard to public safety in the outdoor environment. CDC's program for 2002 and beyond emphasizes the goal of offering Lyme disease endemic communities a wide assortment of practical tick control strategies for their use in preventing Lyme disease. Such strategies include environmental management, biological and chemical control of ticks, and enhanced personal protection through tick avoidance, immunization, and other measures. Areas of research include the development of natural forest products for use as environmentally acceptable alternatives in pest control, deer- and rodent-targeted methods of insecticide application, further efforts to predict Lyme disease risk on a national scale, and further understanding of host immune responses to infection with the Lyme disease bacterium. Continued education and improved laboratory tests for early and correct diagnosis and treatment will further the trend of reduced complications from Lyme disease.

For more information on this and other CDC programs, visit www.cdc.gov/programs.

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